Listing of Claims:

1 1. (Currently amended) Λ follicle stimulating hormone peptide <u>conjugate</u> comprising <u>at least one</u>
the moiety having the formula:

- 3 4 wherein
- 5 D is a member selected from -OH and R¹-L-HN-;
- 6 G is a member selected from R¹-L- and -C(O)(C₁-C₆)alkyl;
- R¹ is a moiety comprising a member selected a moiety comprising a straight-chain or branched
 poly(ethylene glycol) residue; and
- 9 L is a linker which is a member selected from a bond, substituted or unsubstituted alkyl and 10 substituted or unsubstituted heteroalkyl.
- 11 such that when D is OH, G is R¹-L-, and when G is -C(O)(C₁-C₆)alkyl, D is R¹-L-NH-.
- 1 2. (Currently amended) The peptide <u>conjugate</u> according to claim 1, wherein <u>R¹-L L-R¹</u> has the formula:

4 wherein

- 5 a is an integer from 0 to 20.
- (Currently amended) The peptide <u>conjugate</u> according to claim 1, wherein R¹ has a structure that
 is a member selected from:

$$\label{eq:chiooff} \begin{cases} \bigvee_{q} s = (\text{CH}_{2}\text{CH}_{3}\text{O})_{2}\text{CH}_{3} & \vdots & \begin{cases} \bigvee_{q} s = (\text{CH}_{2}\text{CH}_{3}\text{O})_{2}\text{CH}_{3} \\ \text{NHC(O)CH}_{2}\text{CH}_{3}(\text{OCH}_{2}\text{CH}_{2})\text{OCH}_{3} \end{cases} \end{cases}$$

- e and f are integers independently selected from 1 to 2500; and
 q is an integer from 0 to 20.
- 4. (Currently amended) The peptide <u>conjugate</u> according to claim 1, wherein R¹ has a structure that
 is a member selected from:

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e, f and f' are integers independently selected from 1 to 2500; and q and q' are integers independently selected from 1 to 20.

(Currently amended) The peptide <u>conjugate</u> according to claim 1, wherein R¹ has a structure that
is a member selected from:

- e, f and f' are integers independently selected from 1 to 2500; and
 g, g' and g"are integers independently selected from 1 to 20.
- (Currently amended) The peptide <u>conjugate</u> according to claim 1, wherein R¹ has a structure that
 is a member selected from:

$$\xi$$
—C(O)CH₂CH₂(OCH₂CH₂)_eOCH₃; and

- 3 4 wherein
 - e and f are integers independently selected from 1 to 2500.
- (Currently amended) The PSH peptide <u>conjugate</u> according to claim 1, wherein said moiety has
 the formula:

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- (Currently amended) The peptide <u>conjugate</u> according to claim 1, wherein said peptide has an
 amino acid sequence selected from SEQ[.] ID[.] NO:1 and SEQ ID NO:2.
- (Currently amended) The FSH peptide <u>conjugate</u> according to claim 1, wherein said moiety has
 the formula:

$$\label{eq:local_equation} \left\{ \begin{array}{ll} \text{Fuc}_{i} \\ \text{Fuc}_{i} \\ \text{GlcNAc-GlcNAc-Man} \\ \text{GlcNAc-GlcNAc-Man} \\ \text{IGlcNAc-(Gal)}_{gl_{t}^{-}} \cdot \left(\operatorname{Sia}_{j}^{-} \cdot \left(\operatorname{Ria}_{j}\right)_{g}^{-} \cdot \left(\operatorname{Ria}_{j}^{-} \cdot \left(\operatorname{Ria}_{j}\right)_{g}^{-} \cdot \left(\operatorname{Ria}_{j}\right)_{g}^{-} \cdot \left(\operatorname{Ria}_{j}^{-} \cdot \left(\operatorname{Ria}_{j}\right)_{g}^{-} \cdot \left(\operatorname{Ria}_{j}\right)_{g}^{-} \cdot \left(\operatorname{Ria}_{j}^{-} \cdot \left(\operatorname{Ria}_{j}\right)_{g}^{-} \cdot \left(\operatorname{R$$

4 wherein

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5 a, b, c, d, i, r, s, t, and u are integers independently selected from 0 and 1;

6 q is 1;

7 e, f, g, and h are members independently selected from the integers from 0 to 6;

8 i. k. l. and m are members independently selected from the integers from 0 and 100;

v, w, x, and y are independently selected from 0 and 1, and least one of v, w, x and y is 1;

10 AA is an amino acid residue of said FSH peptide;

11 Sia-(R) has the formula:

12

20

14 D is a member selected from OH and R¹-L-HN;

15 G is a member selected from R⁺-L- and -C(O)(C₁-C₆)alkyl;

16 R*-is a moiety comprising a member selected a straight-chain or branched poly(ethylene
17 glycol) residue; and

18 L is a linker which is a member selected from a bond, substituted or unsubstituted alkyl
19 and substituted or unsubstituted heteroalkyl,

such that when D is OH, G is R^+L , and when G is $-C(O)(C_+C_6)$ alkyl, D is R^+L NH.

- 1 10. (Currently amended) The peptide <u>conjugate</u> according to claim 9, wherein said amino acid residue is an asparagine residue.
- 1 1. (Currently amended) The peptide <u>conjugate</u> according to claim 10, wherein said said amino acid residue is an asparagine residue which is a member selected from N7 of SEQ ID NO:2, N24 of SEQ ID NO:2, N52 of SEQ ID NO:1, and N78 of SEQ ID NO:1, and combinations thereof.
- (Currently amended) The peptide <u>conjugate</u> according to claim 1, wherein said peptide is a
 bioactive follicle stimulating hormone peptide.
- 1 13. (Original) A method of making a FSH peptide conjugate comprising the mojety:

2 3 wherein

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D is a member selected from -OH and R1-L-HN-;

5 G is a member selected from R¹-L- and -C(O)(C₁-C₆)alkyl;

R¹ is a moiety comprising a member selected a straight-chain or branched poly(ethylene glycol)
 residue; and

L is a linker which is a member selected from a bond, substituted or unsubstituted alkyl and substituted or unsubstituted heteroalkyl,

such that when D is OH, G is R^1 -L-, and when G is $-C(O)(C_1$ -C₆)alkyl, D is R^1 -L-NH-, said method comprising:

(a) contacting a substrate FSH peptide with a PEG-sialic acid donor moiety having the formula:

and an enzyme that transfers said PEG-sialic acid onto an amino acid or glycosyl residue
 of said FSH peptide, under conditions appropriate for the transfer.

14. (Currently amended) The method according to claim 13, wherein R¹-L L-R¹ has the formula:

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a is an integer from 0 to 20.

15. (Original) The method according to claim 13, wherein R¹ has a structure that is a member
 selected from:

$$\label{eq:chichiochichiochichiochi} \begin{cases} \bigvee_{q} s - (\text{ch,ch,o),ch,} & \vdots & \bigvee_{q} s - (\text{ch,ch,o),ch,} \\ \text{NHC(0)ch,ch,(och,ch,)och,} & \vdots & \bigvee_{q} s - (\text{ch,ch,o),ch,} \\ \bigvee_{q} s - (\text{ch,ch,o),ch,} & \vdots & \bigvee_{q} s - (\text{ch,ch,o),ch,} \\ \bigvee_{q} s - (\text{ch,ch,o),ch,} & \vdots & \bigvee_{q} s - (\text{ch,ch,o),ch,} \\ \bigvee_{q} s - (\text{ch,ch,o),ch,} & \vdots & \bigvee_{q} s - (\text{ch,ch,o),ch,} \\ \bigvee_{q} s - (\text{ch,ch,o),ch,} & \vdots & \bigvee_{q} s - (\text{ch,ch,o),ch,} \\ \bigvee_{q} s - (\text{ch,ch,o),ch,} & \vdots & \bigvee_{q} s - (\text{ch,ch,o),ch,} \\ \bigvee_{q} s - (\text{ch,ch,o),ch,} & \vdots & \bigvee_{q} s - (\text{ch,ch,o),ch,} \\ \bigvee_{q} s - (\text{ch,ch,och,ch,och,} & \vdots & \vdots \\ \bigvee_{q} s - (\text{ch,ch,och,ch,och,} & \vdots & \vdots \\ \bigvee_{q} s - (\text{ch,ch,och,ch,och,ch,och,} & \vdots \\ \bigvee_{q} s - (\text{ch,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,och,ch,oc$$

- 5 e and f are integers independently selected from 1 to 2500; and
- 6 q is an integer from 0 to 20.
- 1 16. (Original) The method according to claim 13, wherein R¹ has a structure that is a member
- 2 selected from:

3 4

4 wherein

e, f and f' are integers independently selected from 1 to 2500; and
 q and q' are integers independently selected from 1 to 20.

10. (Original) The method according to claim 13, wherein R¹ has a structure that is a member
 2 selected from:

4 wherein

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- 5 e, f and f' are integers independently selected from 1 to 2500; and
- 6 q, q' and q"are integers independently selected from 1 to 20.
- 1 18. (Original) The method according to claim 13, wherein \mathbb{R}^1 has a structure that is a member
- selected from:

4 wherein

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- e and f are integers independently selected from 1 to 2500.
- 1 19. (Original) The method of claim 13, further comprising, prior to step (a):
- 2 (b) expressing said substrate follicle stimulating hormone peptide in a suitable host.
- 1 20. (Original) The method of claim 13, wherein said host is selected from an insect cell and a
- 2 mammalian cell.

- 1 21. (Currently amended) A method of stimulating ovarian follicles in a mammal, said method
- 2 comprising administering to said mammal the a peptide conjugate according to claim 1.
- 1 22. (Currently amended) A method of treating a condition in a subject in need thereof, said condition
- 2 characterized by reproductive infertility said method comprising the step of administering to the subject
- 3 an amount of the a peptide conjugate according to claim 1, effective to ameliorate said condition in said
- 4 subject.
- (Currently amended) A pharmaceutical formulation comprising the folliele stimulating hormone
- 2 peptide conjugate according to claim 1, and a pharmaceutically acceptable carrier.